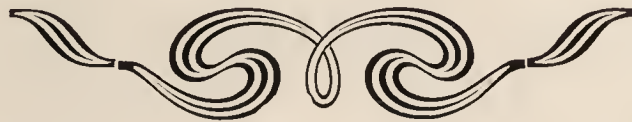


Borough of Stoke-upon-Trent.

1904.

STOKE-UPON-TRENT URBAN SANITARY AUTHORITY.



ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH.



G. PETGRAVE JOHNSON,

M.D., C.M., D.P.H.,

Fellow of the Royal Institute of Public Health ;

Fellow of the Incorporated Society of
Medical Officers of Health ;

Medical Officer of Health.

STOKE-UPON-TRENT :

C. H. Vyse, Church Street & Wolfe Street,

1905.

Borough of Stoke-upon-Trent.

MEMORANDA.

Population at Census, 1891	...	...	...	...	24,027
Population at Census, 1901	...	...	...	...	30,458
Estimated Population at the middle of 1903	...	...	...	...	32,898
Number of Inhabited Houses at Census, 1891	...	...	...	...	4,486
„ „ „ „ 1901	...	...	...	...	6,012.
„ „ „ „ the end of 1904, about	...	...	...	...	6,719
Birth Rate per 1,000 living for 1904	...	...	...	...	32·8
Death Rate per 1,000 living for 1904	...	...	...	...	15·9
Death Rate from the seven principal Epidemic Diseases in 1904	...	...	...	...	2·401
Deaths under 1 year per 1,000 births in 1904	...	...	...	...	148
Number of Persons per acre at Census, 1901	...	...	...	...	16·2
„ „ „ „ at the end of 1904	...	...	...	...	17·68
New Dwelling-houses erected in 1904	...	...	...	...	146
Rateable Value of the Borough (for Borough Rate purposes) in 1904	...	...	...	...	£116,368
District Rate in 1904	...	...	...	...	3/2
Other Rates in 1904	...	...	...	...	5/6

Date of Incorporation, 2nd January, 1874.

Commission of the Peace granted 29th November, 1900.

Borough of Stoke-upon-Trent.

HEALTH COMMITTEE.

1903=4.

CHAIRMAN :

MR COUNCILLOR T. R. YOXALL, J.P.

VICE-CHAIRMAN :

MR COUNCILLOR GIBSON.

MEMBERS :

THE MAYOR (MR COUNC. RISELEY)	MR COUNCILLOR MELLOR
MR ALDERMAN WOOLLISCROFT	MR COUNCILLOR PRICE
MR COUNC'LOE W. B. HACKNEY	MR COUNCILLOR GIBSON
MR COUNCILLOR ALLISON	MR COUNCILLOR LOWE
MR COUNCILLOR HARDING	MR COUNCILLOR LEESE.

TOWN CLERK :

MR J. B. ASHWELL.

BOROUGH SURVEYOR :

MR A. BURTON, A.M.I.C.E., F.S.I., M.S.I.

INSPECTOR OF NUISANCES :

MR T. STAKE, A.S.I.

By the Order of the Local Government Board, dated March, 1891, the Medical Officer of Health is required to "make an Annual Report to the Sanitary Authority up to the end of December in each year, comprising a summary of the action taken or which he has advised the Sanitary Authority to take during the year for preventing the spread of disease, and an account of the sanitary state of the district generally at the end of the year. The Report shall also contain an account of the enquiries which he has made as to conditions injurious to health existing in the district, and of the proceedings in which he has taken part, or advised under any Statute so far as such proceedings relate to those conditions; and also an account of the supervision exercised by him or on his advice for sanitary purposes over places and houses that the Sanitary Authority have power to regulate, with the nature and results of any proceedings which may have been so required and taken in respect of the same during the year. The Report shall also record the action taken by him or on his advice, during the year in regard to offensive trades, to dairies, cowsheds, and milkshops, and to Factories and Workshops. The Report shall also contain tabular statements of the sickness and mortality within the district."

By the instructions of the Local Government Board "the Medical Officer of Health must himself send a copy of the Annual Report to the Local Government Board and one to the County Council."

By the Factory and Workshops Act of 1901, the "Medical Officer is now required to specifically report on the administration of that Act in workshops and workplaces in his district, and to send a copy of the Report to the Secretary of State."

STOKE-UPON-TRENT,

FEBRUARY. 1905.

To the Mayor, Aldermen and Councillors of the
Borough of Stoke-upon-Trent.

GENTLEMEN,

I have much pleasure in submitting to you my Fifth Annual Report with reference to the Sanitary District which is under my superintendence, and in doing so, I beg to direct your attention specially to the following matters, which have still to be dealt with, and which are referred to more or less fully in the body of this Report :—

- (1) The Staff and Accommodation of the Health Department.
- (2) The need of Bye-Laws for—
 - (a) The Prevention of Nuisances.
 - (b) The Regulation of Houses Let in Lodgings.
- (3) The inadequacy of the present Bye-Laws with reference to Slaughter-houses.
- (4) The defective administration of the regulations relative to Cowsheds.
- (5) The need of introducing further measures aimed at reducing the Infantile Mortality.
- (6) The introduction of measures for dealing with Phthisis.

I am, Gentlemen,

Your obedient Servant,

G. PETGRAVE JOHNSON,

MEDICAL OFFICER OF HEALTH.

AREA, PHYSICAL FEATURES, AND GENERAL CHARACTER
OF THE DISTRICT.

The Borough is 1882 acres in area, and is roughly four-sided, with angles north, south, east, and west. About fifty acres are covered with water. It is bounded on the north-east side by the Fowlea Brook and the County Borough of Hanley; on the south-east side by the River Trent and the Urban District of Fenton and the Parish of Hanford in the Stone Rural District; on the south-west by the Lyme Brook and the Parish of Clayton in the Newcastle-under-Lyme Rural District; and on the north-west by the Borough of Newcastle-under-Lyme and the Wolstanton Rural District.

The Basford, Hartshill and Penkhull Hill runs from the North-west southwards into the Borough, causing a considerable elevation of the centre of the district.

The highest point in the Borough corresponds very nearly with the situation of the Penkhull Board Schools, and is 550 feet above the sea level. From this point the ground slopes away rapidly on the north-east and south-east sides towards the valleys of the Fowlea Brook and the River Trent, and less rapidly on the south-west to the Lyme Brook. The lowest point in the Borough is at the junction of the Lyme Brook and the River Trent, where it is 331 feet above the sea level.

HEIGHTS ABOVE SEA LEVEL.

Penkhull Board Schools	...	...	...	550 feet
North Staffordshire Infirmary	...	...	...	541 ,,
Basford Post Office	...	...	...	536 ,,
Hartshill Church	...	...	...	513 ,,
The Convent	...	...	...	431 ,,
Trent Vale Church...	...	...	...	366 ,,
The Town Hall	...	...	...	361 ,,
The Sewage Farm	...	...	...	349 ,,
Hanford Bridge	...	...	...	338 ,,

The Borough is located in the midst of the Pottery Coal-field. The Penkhull Hill is capped by a mass of red sandstone (Keele Series), with grey sandstone of the Newcastle-under-Lyme Series underlying it and appearing on the surface on the north-east, east, and south-west sides of the hill, it also appears at the north-west limits of the Borough towards Newcastle. Underlying the grey sandstone and appearing on the south, east, and north-east sides are the red and mottled Etruria marls, they also appear at the north-west part of the Borough. Springs come to the surface in the sides of the hill at the Junction of the sandstone and clay; the water from these was at one time largely used for domestic purposes. In the lower parts of the Borough along the beds of the River Trent and the Fowlea and Lime Brooks alluvial gravel and sand are found with much water held up by boulder clay at a depth of a few feet. In all the other parts of the Borough, and mainly to the west side of the Penkhull Hill, the subsoil consists of boulder clay, at places very stiff, and at others very loose and gravelly.

INDUSTRIES OF THE BOROUGH AND SURROUNDING DISTRICTS.

The Chief are : 1.—China and Earthenware Manufacture. 2.—Coal Mining. 3.—Iron Works. 4.—Brick and Tile Making. 5.—Railway Works.

CENSUS, MARCH 31st, 1901.

MUNICIPAL BOROUGH OF STOKE-UPON-TRENT-

Civil Parishes and Wards	Houses				Population		
	Inhabited	Uninhabited		Building	Persons	Males	Females
		In Occupation	Not in Occupation				
Civil Parish— Stoke-upon-Trent Area, 1882 acres	6012	145	186	141	30458	14950	15508
Wards—East ...	1768	107	46	11	8789	4355	4434
South ...	2057	14	79	76	9826	4738	5088
West ..	2187	24	61	54	11843	5857	5986

POPULATION.

The population, according to the Census of

1871 was 15,144

1881 „ 19,261

1891 „ 24,027

1901 „ 30,458

The estimated population at the middle of the year 1904 was 32,898, and the statistics in this Report are based upon that estimate.

The estimated population at the middle of 1903 was 32,127, so that from June, 1903, to June, 1904, there was an apparent increase of 771.

The number of inhabited houses in the Borough at the end of 1903 was 6,614 ; at the end of 1904 it was 6,719.

There are about 196, 814, and 872 acres in the East, West, and South Wards respectively.

The natural increase in the population during 1904 (*i.e.*: the excess of births over deaths) was 556.

The number of persons per house at Census 1901 was 5·06

„ „ „ acre „ „ 16·2

„ „ „ house at the end of 1904 was 4·9

„ „ „ acre „ „ 17·68

The number of persons per house in England and Wales at Census 1901 was 5·19 ; in 1891 it was 5·32.

NATURAL INCREASE IN THE POPULATION FROM THE END
OF 1891.

Year	Excess of Births over Deaths		Population at end
1900—Average for 1893 to 1900	375	...	29,772 (estimated)
1901—	475 ... 30,247
1902—	547 ... 30,794
1903—	544 ... 31,338
1904—	556 ... 31,894

At the end of 1904 the estimated population was 33,291

„ 1903 „ „ „ 32,511

If those estimates be correct, immigration must account for the difference between 32,511 plus 556 and 33,291 (*i.e.*, 224 in the year). These statistics show a steady influx of persons, and indicates continued prosperity.

NEW HOUSES ERECTED.

In 1892	...	104	In 1898	..	198
1893	...	61	1899	...	273
1894	...	78	1900	...	363
1895	...	50	1901	...	270
1896	...	106	1902	...	199
1897	...	156	1903	...	140

In 1904 the number of houses erected was 146 (*i.e.* 6 more than in the previous year).

Plans for 97 dwelling-houses were passed during the year. In 1903 93 plans were passed. It is estimated that about half the Borough is now built upon. A large proportion of the remainder is farm land. There is still a considerable amount of land available for building purposes.

RATEABLE VALUE OF THE BOROUGH.

Year ...	1896	1897	1898	1899	1900	1901	1902	1903	1904
	£	£	£	£	£	£	£	£	£
For General District Rate ...	78743	83269	87143	91288	96653	103500	108033	110156	112108
For Borough Rate ...	83660	87395	91454	95301	100825	108000	111940	114417	116368
Poor Rate, Borough and County Education Rate, &c., in the Pound ...	s. d. 4 4	s. d. 4 5	s. d. 4 7	s. d. 4 6	s. d. 4 4	s. d. 4 9	s. d. 5 0	s. d. 5 2	s. d. 5 6
District Rate in the Pound ...	2 8	2 8	2 8	2 8	2 9	2 8	2 9	2 8	3 2

MARRIAGES IN THE BOROUGH OF STOKE-UPON-TRENT.

Year ...	Average for 10 years 1891-1900	1901	1902	1903
Number of Marriages	253	302	233	
Marriage Rate per 1000 of population	18·8	19·7	14·8	
Marriage Rate for Staffordshire ...	Average 1889-1898 16·2	16·7	15·9	
Marriage Rate of England and Wales	Average 1891-1900 15·6	15·9	15·9	

BIRTHS.

The total number of Births registered in the Borough in 1904 was 1,135—588 males and 547 females, equal to an annual birth-rate per 1,000 of the population of 34·5.

The number of children born in the Workhouse, and included in the above was :—

Belonging to Hanley	...	23—viz , 10 males, 13 females
„ Longton	... 11	„ 6 „ 5 „
„ Fenton	... 16	„ 9 „ 7 „
„ Stoke	... 9	„ 4 „ 5 „
„ Stoke Rural	0	„ 0 „ 0 „

—
TOTAL 59, of which 50 did not belong to Stoke.

Five births—4 boys and 1 girl—occurred in the Borough not belonging thereto.

The corrected number of births was therefore 1,080—559 males and 521 females, and the corrected Birth Rate 32·8.

The Birth Rate in the 76 large towns of England and Wales in 1904 was 29·1, so that our own rate was 3·7 higher ; it is above our own average rate for the past ten years.

Year	Corrected Birth Rate	Birth Rate of 33 large towns	Birth Rate of England and Wales	Birth Rate of 102 smaller towns	Birth Rate of Rural England and Wales
Average for 10 years 1891-1900 }	31·5	30·9	29·9	—	—
1901	31·6	30·0	28·5	—	—
1902	32·8	30·0	28·6	27·3	—
1903	30·9	29·7	28·4	27·4	27·3
1904	32·8	29·1	27·9	27·5	26·8

ILLEGITIMATE BIRTHS.

The number of illegitimate children born in the Borough, including the Workhouse, was 65 ; of these 35 were children of residents in Stoke, 16 males and 19 females.

Of the 35 illegitimate births belonging to Stoke, 8 occurred in the Workhouse.

Of the 30 foreign illegitimate births, 29 occurred in the Workhouse.

In 1903 the total number born in the Borough was 64, and of those 31 were children of residents in Stoke.

The following table shews the number of Illegitimate Births for 100 births in the Borough :—

Year ...	1896	1897	1898	1899	1900	1901	1902	1903	1904
Number of Illegitimate Births belonging to the Borough ...	22	23	30	24	20	50	37	31	35
Illegitimate Births to 100 Births ...	2·8	2·8	3·3	2·7	2·04	5·1	3·6	3·1	3·2
Illegitimate Births to 100 Births in England & Wales	4·2	4·2	4·2	4·0	4·0	3·9	3·9		
Illegitimate Births to 100 Births in Hanley, Shelton, Stoke, Fenton, and Longton ...		5·3	5·0	4·8	4·5	5·2	5·1		

The Illegitimate Birth Rate, as stated above, is in proportion to every 100 children born, *not* to the general population. It is the corrected rate for the Borough, all Illegitimate Births in the Workhouse belonging to Stoke have been included.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1904 AND PREVIOUS YEARS.

Year	Population estimated to middle of each Year	BIRTHS		TOTAL DEATHS REGISTERED IN THE DISTRICT.								TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT		Deaths of Non-residents registered in Public Institutions in the District		Deaths of Residents registered in Public Institutions beyond the District		NETT DEATHS AT ALL AGES BELONGING TO THE DISTRICT	
				Under 1 Year of Age				At all Ages											
		Number	Rate*	Number	Rate 1,000 Births registered	Number	Rate*	9	10	11	12	13							
1	2	3	4	5	6	7	8	9	10	11	12	13							
1894	26000	784	30.1	144	183	607	23.3	—	197	—	410	15.7							
1895	26221	835	31.5	150	192	725	27.4	—	274	2	453	17.2							
1896	26960	774	28.7	131	163	652	24.1	280	227	2	427	15.8							
1897	27561	808	29.3	155	191	660	23.9	266	222	1	435	15.9							
1898	28176	892	30.5	148	166	759	26.9	291	241	7	525	18.6							
1899	28546	872	30.7	196	224	809	28.3	318	260	5	554	19.2							
1900	29439	977	33.1	161	164	793	26.9	314	264	15	544	18.5							
1901	30639	970	31.6	181	186	750	24.4	309	260	13	503	16.3							
1902	31374	1030	32.8	166	162	787	25.8	374	310	7	484	15.4							
1903	32127	994	30.9	136	137	749	23.0	362	304	5	450	14.0							
Averages for years 1894-1903	28704	893	30.9	157	176	729	25.4	314	256	6	478	16.6							
1904	32898	1080	32.8	160	148	836	25.3	383	328	16	524	15.9							

* Rate in Columns 4, 8, and 13 calculated per 1,000 of the estimated population.

Total population at all ages, 30,458

Area of District in acres (exclusive of area covered with water), 1832.

Number of inhabited houses, 6012

Average number of persons per house, 5.06

At Census of 1901

I. Institutions within the District receiving sick and infirm persons from outside the District	II. Institutions outside the District receiving sick and infirm persons from the District	III. Other Institution, the deaths in which have been distributed among the several localities in the District.
<p>North Staffordshire Infirmary, Harts Hill, Stoke-on-Trent. 250 beds.</p> <p>Stoke-on-Trent Union Workhouse (serving the County Borough of Hanley, the Borough of Longton, and Stoke-upon-Trent, the Urban District of Fenton, and the Rural District of Stoke-upon-Trent).</p> <p>The Convent Home for Incurables.</p>	<p>Bucknall Isolation Hospital, 130 beds.</p> <p>—</p> <p>The Bagnall Smallpox Hospital.</p>	

Is the Union Workhouse within the District? Yes.

CAUSES OF, AND AGES AT, DEATH DURING YEAR 1904.

CAUSE OF DEATH	DEATH AT THE SURJOINED AGES OF RESIDENTS, WHETHER OCCURRING IN OR BEYOND THE DISTRICT							DEATHS OF ALL AGES, SHOWING WHERE DEATHS OCCURRED, WHETHER OCCURRING IN OR BEYOND THE DISTRICT					TOTAL DEATHS IN PUBLIC INSTITUTIONS, IN THE DISTRICT
	All Ages 2	Under 1 year 3	1 and under 5 4	5 and under 15 5	15 and under 25 6	25 and under 65 7	65 and up- wards 8	Stoke, exclud- g Institns 9	Buck- nall 10	W. H. 11	N. S. I. 12	L'ng'n C'tage H'spital 13	
Measles ... ..	...	...	6	2	1	...	...	5	4	...	...	...	1
Scarlet Fever	9	...	1	...	1	...	...	1	...	...	...	...	...
Whooping Cough...	1	...	18	6	...	...	...	14	11	...	...	...	1
Diphtheria and Membranous Croup ...	25	...	...	...	1	...	...	4	...	...	...	...	1
Enteric Fever	5	...	...	...	...	...	...	2	...	...	1	...	6
Epidemic Influenza	2	...	...	2	...	1	1	39	...	...	...	...	1
Diarrhoea	39	31	5	1	...	...	1	11	...	...	...	...	2
Enteritis	12	8	2	1	...	...	...	2	...	...	1	...	6
Puerperal Fever	2	...	1	...	1	1	...	1	...	...	...	...	...
Erysipelas	1	...	1	...	...	...	...	1	...	...	...	...	...
Other Septic Diseases	3	1	...	1	1	...	...	1	...	...	2	...	11
Phthisis	29	...	1	1	6	20	1	19	...	6	4	...	44
Other Tubercular Diseases	12	4	6	1	1	...	4	12	...	...	3	...	10
Cancer, malignant disease	23	...	...	1	...	19	16	17	...	8	...	...	20
Bronchitis	51	7	5	1	...	22	3	43	...	1	...	...	38
Pneumonia	26	7	6	1	...	9	...	25	...	...	...	...	7
Pleurisy	2	...	...	...	1	1	...	2	...	...	...	...	...
Other Diseases of Respiratory Organs ...	1	...	...	...	...	...	1	1	...	...	1	...	...
Alcoholism (Cirrhosis of Liver)	11	...	...	...	...	9	2	10	...	...	...	...	10
Veneral Diseases	1	1	...	...	...	...	...	1	...	...	...	...	14
Premature Birth	16	16	...	...	...	...	...	16	...	...	...	...	2
Diseases and Accidents of Parturition ...	2	...	...	...	0	2	...	2	...	...	...	...	1
Heart Disease	52	...	...	1	1	38	12	41	...	9	2	...	47
Accidents	8	1	4	1	1	0	1	5	...	1	1	1	30
Suicides	3	...	...	...	...	2	1	3	...	...	...	...	1
Anthrax ... ..	...	...	...	...	...	...	...	...	...	...	...	...	1
All other causes	188	84	17	4	6	38	39	176	0	5	7	...	129
All Causes	524	160	72	22	20	166	84	453	15	33	22	1	383

DEATHS.

The number of deaths registered in the Borough in 1904 was 836—461 males and 375 females; this gave a Death Rate of 25·3 per 1,000 of the population at the middle of the year.

Of the total deaths, 328 (209 males and 119 females) were deaths of non-residents dying in the district, and having the deaths registered here. Of the foreign deaths, 135 occurred at the North Stafford Infirmary, 192 at the Workhouse, and 1 at the Convent. The Workhouse serves the districts of Longton, Fenton, Hanley, and Stoke Rural, as well as Stoke Urban.

Particulars of the 328 deaths of non-residents were sent monthly to the Medical Officers of Health of the districts to which they belonged.

Sixteen deaths of residents were registered beyond the district, 15 occurred in the Bucknall Isolation Hospital, which is in the Rural District of Stoke-upon-Trent, and 1 in Longton Cottage Hospital.

The corrected number of deaths in the Borough was therefore 524 (males 258, females 266), and the corrected Death Rate 15·9 per 1,000 of the population.

Corrected number of deaths	...	...	524
Death Rate of the Borough for 1904	...	...	15·9
Death Rate of the Borough for 1903	...	...	14·0
Average Death Rate for 10 years, 1892-1901	.	...	17·2
Death Rate for England and Wales in 1904	...	...	16·2
Death Rate for 76 large towns of England and Wales in 1904	...	...	17·2
Death Rate of 103 smaller towns in England and Wales in 1904	...	...	15·6
Death Rate for Rural Districts of England and Wales in 1904	...	...	15·3

The Death Rate for the year compares favourably with the average rate for the past 10 years, and with the rate for England and Wales.

NETT DEATH RATES AND DEATHS OF THE BOROUGH FOR THE
YEARS 1890-1904.

1890 ... 18·4 ... 410	1897 ... 15·9 ... 439
1891 ... 16·5 ... 398	1898 ... 18·6 ... 525
1892 ... 16·7 ... 422	1899 ... 19·2 ... 554
1893 ... 19·0 ... 482	1900 ... 18·5 ... 544
1894 ... 15·7 ... 410	1901 ... 16·3 ... 502
1895 ... 17·2 ... 453	1902 ... 15·4 ... 484
1896 ... 15·8 ... 427	1903 ... 14·0 ... 450
1904 ... 15·9 ... 524	

It will be seen that the rate for the year is below the average.

The following table shows the number of deaths from certain diseases in the years 1903 and 1904:

	1903	1904
Measles	3	0
Enteritis	13	12
Phthisis	25	29
Other Tubercular Diseases	16	12
Cancer	25	23
Other Diseases of Respiratory Organs, other than Pneumonia, Bronchitis, or Pleurisy...	1	1
Alcoholism	10	11
Premature Birth	17	16
Accidents	14	8
Suicides	3	3
All other Causes	172	188

			1903	1904
Scarlet Fever	...	...	5	9
Whooping Cough	...	...	15	1
Diphtheria	...	..	7	25
Enteric Fever	...	...	2	5
Epidemic Influenza	...	...	3	2
Diarrhœa	...	...	13	39
Erysipelas	...	...	1	1
Other Septic Diseases	...	...	3	3
Bronchitis	...	...	39	51
Pneumonia	...	...	31	26
Diseases and Accidents of Parturition			3	2
Heart Disease	...	...	34	52

The largest number of deaths of all ages were from Phthisis and other Tubercular Diseases, Bronchitis, Pneumonia, Heart Diseases, Cancer, Diarrhœa, Enteritis, and Diphtheria.

The increase in the Death Rate compared to that for 1903 is due to the larger number of deaths from Diphtheria, Diarrhœa, Bronchitis, Heart Disease, and Phthisis, which is not wholly balanced by the diminished number from Whooping Cough, Pneumonia, Accidents, and other Tubercular Diseases.

MONTHLY DEATH RATE FROM ALL CAUSES.

Years	1898	1899	1900	1901	1902	1903	1904
January	18·9	17·8	17·9	18·3	21·3	15·6	13·8
February	13·8	18·2	15·9	16·6	19·1	15·6	13·8
March...	15·0	23·6	16·3	14·0	18·7	14·5	18·6
April ...	21·8	19·0	23·6	23·06	13·3	16·0	14·6
May ...	20·1	14·7	18·3	16·3	13·3	9·7	13·5
June ..	13·2	15·6	15·4	15·9	12·0	14·1	12·0
July ...	18·0	19·4	11·8	17·7	11·0	14·0	12·0
August	22·7	20·2	16·3	11·3	10·3	13·0	23·3
September	23·1	23·2	15·4	16·4	13·0	13·0	16·7
October	17·5	17·7	19·9	14·8	10·3	14·2	10·5
November	15·4	18·5	23·2	13·7	20·6	9·7	20·0
December	20·2	21·12	22·0	18·0	22·1	17·5	20·4

NUMBER OF STILL-BORN CHILDREN.

	In 1899	In 1900	In 1901	In 1902	In 1903	In 1904
Buried at the Cemetery ...	46	36	50	56	59	46
„ „ Workhouse	3	4	4	5	1	6
	—	—	—	—	—	—
TOTAL ...	49	40	54	61	60	52

Still-born children to 100	
children born ...	5.4 ... 4.0 ... 5.3 ... 5.7 ... 5.4 ... 4.3
Still-born children to 100	
births in England and	
Wales ...	4 ... 4

The law imposes a penalty of £10 upon any person who buries the body of a deceased child as if it were still-born. Anyone may make a declaration that the child was still-born and so secure burial. The law ought to be so amended as to make the written certificate of a Registered Medical Practitioner necessary, and all still-born children should be registered.

The total deaths registered in the Borough occurred as follows :—

	Gross	Belonging to Stoke	Not belonging to Stoke
In Stoke Borough, excluding Institutions ...	453	453	—
In Stoke Union Workhouse ...	225	33	192
In the North Stafford Infirmary ...	157	22	135
In the Convent Home ...	1	—	1
In the Institution for the Blind and Deaf ..	—	—	—
TOTAL ...	836	508	328

BURIALS IN THE BOROUGH.

Burial Ground	In Year 1903	In Year 1904	
Hartshill Cemetery	409	498	
Parish Church Yard	2	2	Closed for some years
Lonsdale Street Ground	5	4	Closed
Penkhull Church Yard	2	1	Closed in 1901
Hartshill Church Yard	1	1	Closed several years
Stoke Union Workhouse Burial Ground	108	120	
TOTAL	527	626	

DEATHS NOT CERTIFIED BY A MEDICAL PRACTITIONER.

Inquests were held on 61 persons, of whom 24 were residents of the Borough, and in these cases the verdicts given were as follows :—

1 Heart Disease	1 Shock following accidental
8 Natural Causes	fracture of leg
1 Congenital Weakness	1 Congestion of Lungs and
1 Strangulation	Bronchitis.
2 Heart Failure	

SUICIDES.

By Drowning whilst of unsound mind, 3.

ACCIDENTS.

By Drowning, 2.

By Burns, 1.

Knocked down by Electric Tram Car, 1.

Internal Scalds through drinking from a Kettle, 1.

Accidental Death, 1.

In 1903 inquests were held on 63 persons, of whom 31 were residents of the Borough.

Besides the above, there were 9 deaths in which, though the causes were not certified by a Medical Practitioner, inquests were not held; in 1903 there were 27 such cases. The following table shews the causes as registered, and the ages :—

Convulsions, 16 days	Rheumatic Gout and Heart
„ 1 year	Failure, 53 years
„ 1 year	Paralysis, 53 years
„ 1 day	Premature Birth, 1 day
„ 4 months	„ 1 day.

The number of uncertified deaths were therefore 33 out of the total of 524, or one in every 15·8. All the deaths have been classified under the causes as registered. In the 76 large towns of England and Wales, the rate per cent. of uncertified deaths (excluding inquest cases) in 1904 was 1·1, compared to 1·7 in Stoke-upon-Trent.

INFANTILE MORTALITY.

The deaths under one year in 1904 numbered 160.

Number of deaths under one year	...	...	...	160
„ per 1,000 in 1904	...	...	..	148
„ under 1 year per 1,000 births in 76				
larger towns in 1904	...	...		160
„ under one year per 1,000 births in				
142 smaller towns in 1904	...			154

Table showing the Infantile Mortality of Stoke for the years 1890-1904, compared with the large towns in England and Wales :—

YEAR	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
Stoke	190	166	161	159	183	179	169	191	165	224	164	186	162	137	148
33 Large Towns	171	167	163	181	152	182	167	177	178	181	172	165	76 larger Towns 145	144	160
England and Wales	151	149	148	159	137	161	148	156	160	163	154	151	133	132	146
Urban Staffs. ..	176	175	174	179	163	181	171	187	181	179	172	171	147	147	—

The Infantile Mortality was lower than that of any previous year, except 1903, which was the lowest ever recorded in the Borough. The larger number of deaths from Diarrhoea is responsible for the higher mortality.

In the Borough of Stoke-upon-Trent there were at the census 1901, 11,982 females, aged 10 years and upwards ; of these, 7,876 were engaged in *no* occupation ; of the remaining 4,106 who were engaged in occupation, 3,115 were unmarried, and 991 married or widowed.

Table showing the Deaths among Infants in 1900, 1901, 1902, 1903, and 1904, classified according to diseases :—

	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Diarrhoea	Enteritis	Influenza	Erysipelas	Syphilis	Other Septic Diseases	Phthisis	Other Tuber Dis.	Bronchitis	Pneumonia	Other Diseases of Respiratory Organs	Premature Birth	Accidents	Other Diseases	Total
1900	3	...	3	...	19	8	1	1	1	...	...	6	17	3	4	9	...	86	161
1901	2	...	7	2	31	2	...	1	1	1	...	2	11	14	...	16	1	90	181
1902	1	...	8	...	10	6	...	...	1	1	...	1	10	9	3	18	1	97	166
1903	...	...	8	1	11	5	...	..	...	...	...	4	6	10	..	17	3	71	136
1904	...	...	..	...	31	8	...	...	1	1	...	4	7	7	...	16	1	84	160

INFANT DEATHS FOR THE YEAR 1904.
(Arranged according to the Causes and Months.)

	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Totals
Measles
Whooping Cough
Diphtheria and Memb. Croup
Diarrhoea ...	2	...	..	...	...	1	1	13	12	2	...	...	31
Enteritis	1	1	3	1	...	..	..	...	...	2	...	8
Erysipelas
Other Septic Dis.	1	...	...	...	1
Syphilis	1	...	...	...	...	...	1
Phthisis
Other Tubercular Diseases	1	...	..	...	...	1	1	...	...	1	...	4
Bronchitis	1	...	...	...	...	1	1	...	...	...	4	7
Pneumonia	1	1	1	1	1	...	...	...	...	2	...	7
Premature Birth	1	3	...	...	...	5	3	...	3	1	16
Accidents	1	...	1
Other Diseases ...	6	8	8	6	7	5	6	11	5	7	7	8	84
Totals ...	8	12	11	13	9	7	10	31	21	9	16	13	160

The large number of deaths among infants under one year of age is a matter which calls for active measures. From my experience as a general practitioner, I am aware that with proper care and attention, a considerable number of these lives could be saved. In previous Reports I have ventured to suggest that some form of general regular inspection of children under a certain age, and in houses under a certain value would be of great use in ensuring better care and

attention being bestowed on the rearing of infants. In the absence of such a general inspection, the agency of Female Inspectors can be made use of. In 1903 I drew up a report on this matter, and presented it to the Health Committee, but on its being pointed out that it would entail an expenditure of something under £100, the report was not further considered. A considerable portion of that report was included in my last Annual Report. I regret to say that no further action has been taken in the matter.

The distribution of leaflets on infant feeding which was introduced four years ago has been regularly carried out by the Registrar of Births and Deaths.

It is now possible for the Sanitary Authority to obtain the addresses of all births in the Borough from week to week, but such information is of little use without a sufficient staff.

SEVEN PRINCIPAL EPIDEMIC DISEASES.

Number of Deaths in 1904	...	...	...	79
Zymotic Death Rate in 1904	...	...	...	2·401
„ „ „ 1903	...	...	...	1·4
„ „ „ for England & Wales 1904				1·94

The Zymotic Death Rate in the 76 large towns of England and Wales in 1904 was 2·49. In 1902 the Zymotic Death Rate of the Borough was 1·21.

DEATHS FROM ZYMOTIC DISEASES.

	Number of Deaths		Rates per 1000 living	
	1903	1904	1903	1904
Diarrhoea	13	39	0·405	1·186
Whooping Cough	15	1	0·467	0·031
Diphtheria and Membranous Croup	7	25	0·217	0·761
Scarlet Fever	5	9	0·156	0·271
Enteric Fever... ..	2	5	0·062	0·152
Measles	3	0	0·093	0
Small-pox	0	0	0	0
Total	45	79	1·4	2·401

The Zymotic Death Rate shews an increase of 1·001, compared to the previous year, and is due to the large number of deaths from Diphtheria, Scarlet Fever, and Diarrhoea. The average Zymotic Death Rate for the past 10 years was 2·405, so that the rate for 1904 was just below the average.

Number of Deaths at certain ages from the Principal Zymotic Diseases in 1904 :—

	Under 5 years	Over 5 years	Total
Diarrhoea	31	8	39
Measles ... ..	...	...	...
Whooping Cough	1	...	1
Diphtheria and Membraneous Croup	18	7	25
Scarlet Fever	6	3	9
Enteric Fever ... ..	...	5	5
Small-pox ... ..	...	...	...
Total	56	23	79

As usual the majority of the deaths occurred amongst children under 5 years of age, shewing the necessity of specially protecting young children from infection.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1904.

Notifiable Disease	Cases Notified in Whole District							Total Cases Notified in each locality			No. of Cases removed to Hospital from each locality		
	At all Ages	At Ages—Years						1	2	3	1	2	3
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65	65 and upwards	East Ward	West Ward	South Ward	East Ward	West Ward	South Ward
Small-pox...	1	...	...	..	...	...	1	1	...	...	1	...	...
Diphtheria	156	1	33	79	19	24	..	52	40	64	27	29	34
Membranous Croup ...	6	...	6	...	...	...	...	1	1	4	1	...	2
Erysipelas	41	1	1	3	4	28	4	9	20	12	...	...	...
Scarlet Fever	228	1	75	133	14	5	...	67	96	65	38	41	34
Enteric Fever	12	...	...	2	...	9	1	2	4	6	1 to N. S. I.	1 to N. S. I.	3 to N. S. I.
Puerperal Fever .	3	...	...	...	2	1	...	...	3	...	...	...	...
Totals	447	3	115	217	39	67	6	132	164	151	69	71	76

N.S.I.—North Staffordshire Infirmary. W.H.—Workhouse Hospital.
Isolation Hospital—The Bucknall Isolation Hospital, in the Rural District of Stoke-on-Trent.

ZYMOTIC DEATH RATES IN STOKE-UPON-TRENT IN 1900-1904.

	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
Stoke-upon-Trent..	1.03	2.74	1.58	2.64	1.03	1.74	2.85	2.28	4.25	4.44	2.54	2.31	1.21	1.4	2.4
33 large towns of England & Wales ...	2.77	2.41	2.63	3.17	2.43	2.82	2.90	2.87	2.85	2.81	2.50	2.68	...	...	..
76 larger towns ...	...	...	...	...	...	...	...	...	...	...	...	...	2.12	1.89	2.49
England and Wales ...	2.05	1.33	1.90	2.47	1.76	2.14	2.18	2.15	2.22	2.21	2.00	2.05	1.64	1.46	1.94
103 smaller towns ...	...	...	...	...	...	...	...	...	...	...	...	...	1.53	1.41	...
142 smaller towns ...	...	...	..	...	...	..	...	...	...	...	..	...	...	...	2.02
Rural England and Wales ...	...	...	...	...	...	...	...	...	...	...	...	...	..	1.08	1.28

NOTIFICATION OF INFECTIOUS DISEASES.

The Infectious Diseases Notification Act, 1889, has been in force in the Borough since February 1st, 1890.

The diseases which are notified in the Borough are those scheduled in the Act, together with Bubonic Plague, added by order of the Local Government Board at the end of 1900. Measles is not included in the diseases notified.

The following notifications of cases were received during the year :—

	North Stafford Infirmary	The Workhouse	Blind and Deaf School	The Borough (excluding Institutions)	Total
Scarlet Fever	7	...	4	217	228
Diphtheria	3	2 W.H.* 10 C.H.†	3	138	156
Membranous Croup ... ..	...	...	...	6	6
Enteric Fever	24	2	...	12	38
Puerperal Fever ... ..	...	...	.	3	3
Erysipelas	2	17	...	30	49
Small-pox ... ..	...	...	..	1	1
					481

Included in the above are 34 foreign cases, so that the total number belonging to the Borough was 447.

In 1903 the number of cases notified belonging to the Borough was 281, so that there were 166 cases more in 1904.

The foreign cases occurred as follows :—

24 cases of Enteric Fever at the North Stafford Infirmary.

2 ,, ,, ,, Workhouse.

7 cases of Erysipelas at the Workhouse.

1 case of Erysipelas at the North Stafford Infirmary.

Six cases were notified a second time—viz., 2 cases of Diphtheria, 1 of Scarlet Fever, and 3 of Enteric Fever.

So that the actual number of notification certificates received was 487, or 145 more than the previous year.

The Infectious Diseases Notification Act entailed a charge of £55 13s. 6d.

£ s. d.

The amount paid in 1893 was 62 2 6 for 521 notifications

„	„	1894	47	13	6	417	„
„	„	1895	43	17	0	388	„
„	„	1896	35	14	0	317	„
„	„	1897	32	9	6	245	„
„	„	1898	70	17	0	652	„
„	„	1899	86	19	6	788	„
„	„	1900	55	8	6	498	„
„	„	1901	32	17	6	309	„
„	„	1902	25	8	0	258	„
„	„	1903	37	3	0	342	„
„	„	1904	55	13	6	487	„

The large number of notifications was due to epidemics of Scarlet Fever and Diphtheria.

DIPHTHERIA AND MEMBRANEOUS GROUP.

Number of cases belonging to the Borough	...	162
Number of houses infected	... ..	123
Death Rate per 1000 of the population	... ..	0·761
Case Mortality (deaths per 100 cases)	... ..	16·0
Removed to the Isolation Hospital	... ..	93 = 55·5

Table shewing the number of cases of Diphtheria and the number of deaths with the Death Rate and Case Mortality per 100 in 1890—1904 :—

Year	Number of Cases	Number of Deaths	Death Rate	Case Mortality per 100 Cases	Death Rate for 33 Large Towns in England and Wales
1890	...	2	0·09	...	...
1891	14	3	0·11	21·4	0·21
1892	17	3	0·11	23·5	0·27
1893	31	2	0·07	6·4	0·42
1894	18	6	0·28	33·3	0·38
1895	28	2	0·07	7·1	0·35
1896	23	2	0·07	8·6	0·38
1897	32	5	0·18	15·6	0·31
1898	109	14	0·49	12·8	0·31
1899	128	26	0·91	20·3	0·40
1900	129	25	0·84	19·3	0·34
1901	92	17	0·55	18·5	0·33
1902	66	8	·255	12·1	For 76 large towns 0·27
1903	60	7	·217	11·8	0·20
1904	162	25	0·761	16·0	0·20

The number of cases notified was larger than in any previous year.

Of the 25 deaths, 22 occurred in the first eight months of the year ; of these, 6 occurred either before notification or on the day of notification, and 5 others died within three days of being notified.

Five deaths occurred in June, 2 in July, and 5 in August.

In September, in response to a request from the Local Government Board, I reported to the Council fully on the

prevalence of this disease in the Borough, and made certain recommendations. That report, as far as I am aware, has never been really considered, nor has any action been taken to remedy the deficiencies to which I drew attention.

Table shewing the number of cases notified in each Ward in 1903—1904 :—

		East Ward	South Ward	West Ward
Number of Cases in 1903	...	15	23	22
„ „ 1904	...	53	68	41

Case Mortality per 100 among the cases removed to the Isolation Hospital and those left at home :—

Year	Number of Cases removed	Number of deaths among those removed	Case Mortality per cent. in those removed	Case Mortality per cent. in those left at home	Number of Deaths among those left at home	Number left at home
1899	35	3	8·5	24·7	23	93
1900	59	10	16·9	21·4	15	70
1901	55	10	18·1	18·9	7	37
1902	39	5	12·8	11·0	3	27
1903	33	0	0	29·0	7	24
1904	93*	11	11·7	20·2	14	69

* 16 were removed from Institutions.

The number of cases of Membraneous Croup notified in the following years were :—

1896	...	3	1901	...	1
1897	...	0	1902	...	1
1898	...	4	1903	...	1
1899	...	3	1904	...	6
1900	...	2	—		

Of the 6 cases of Membraneous Croup notified, 5 died. Three were removed to the Isolation Hospital, and of these, 2 died.

Cases of Diphtheria at the Cottage Homes ...	...	10
„ „ North Stafford Infirmary		3
„ „ Institution for the Blind and Deaf Children ...		3
„ „ Borough, excluding Institutions ...	...	138
„ „ Workhouse ...	...	2
Total ...		156
Cases of Membraneous Croup in the Borough	...	6
Total ...		162

The following is an outline of what was done during the year to combat the disease :—

In addition to Notification by Medical men, post cards, ready printed, were supplied to all Schools and Attendance Officers for the immediate notification of any cases of suspicious illness, such as sore throat, that might come to their knowledge, and where no medical man was in attendance.

The County Council has continued the arrangements with the Birmingham University, for Bacteriological Examinations, free of charge, of swabs from the throats of suspicious cases. About 21 swabs were sent for examination during the year, and positive results obtained in 6. In the previous year positive results were obtained in one-third of the cases, out of 42 swabs which were then sent.

As in previous years, all cases were visited within a few hours of receipt of notification by the Sanitary Inspector, and enquiries made and noted on printed forms, and steps taken to

secure isolation. Printed sheets with directions as to precautions to be taken, and also extracts from the Public Health Acts, were left at each house.

Post Cards were regularly sent to Schools notifying the presence of the disease in houses, and requesting the exclusion of all children from such houses till further notice. In such cases the children have been excluded from School until a fortnight after disinfection of the house. Post Cards are now being sent to the Schools, stating when the children might be admitted.

Post Cards are sent each week to every medical man in the Borough, notifying the presence of the disease in the different streets where it has occurred during the week. This is done in the case of all the notified diseases.

The Health Committee have supplied antitoxin, free of charge, for prophylactic use in the Borough, and pay a fee for its use. It has been made use of to a greater extent during the year than previously.

From May 8th to December 31st, 174 persons were injected for prophylactic purposes. They had come into contact with 48 cases. None of those injected developed the disease subsequently, except two in one house. They were, I understand, ill at the time of injection. The cost to the Borough was £12 4s. 6d.

On removal of a case to the Hospital, the walls, ceilings, &c., of the room have been sprayed with Izal solution.

All bedding and clothing have been regularly disinfected in the Borough Disinfector.

Attention was always given to the Sanitary condition of the premises where cases occurred, and any defects found, dealt with, special examinations being made when necessary.

In those cases removed to the Isolation Hospital, the average stay in the Hospital has been about 30 days. In the cases remaining at home, the average time intervening between the onset of the disease and the disinfection of the house has been 21 days.

It was not found necessary to close any Schools on account of the prevalence of this disease.

As in previous years, the disease seemed to be spread chiefly by personal contact, or to be conveyed by clothing or bedding.

Cases of Diphtheria classified according to the months :—

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1897	2	5	1	2	1	...	1	1	4	4	7	4
1898	2	2	...	2	7	2	3	22	2	24	23	20
1899	13	16	14	8	9	8	4	8	9	10	12	17
1900	7	10	9	1	12	9	20	10	7	15	16	3
1901	15	14	6	7	8	3	12	4	9	7	5	2
1902	18	10	6	11	6	1	2	...	..	5	4	3
1903	8	3	3	2	6	2	5	3	7	11	4	5
1904	6	9	15	19	17	16	8	20	12	19	9	12
Totals	71	69	54	52	66	41	55	68	50	95	80	76

Number of Houses Infected in the Borough, excluding
Institutions :—

Year	No. of Houses	No. of Cases	Not First Cases in Houses	Percentage of Secondary Cases
1898	48	70	22	31
1899	91	122	31	25
1900	113	123	10	8
1901	76	92	16	17
1902	49	66	17	25
1903	49	59	10	17
1904	123	144	21	14·5

Number of Cases Removed to the Isolation Hospital :—

Year	No. of Cases Notified	No. of Cases Removed	Percentage of Removals
1898	70	7	10
1899	128	35	27·3
1900	123	59	45·2
1901	92	55	60
1902	66	39	58
1903	59	35	59
1904	162†	93*	59

† Of these, 18 were Institution cases. * Of these, 16 were from Institutions.

So that the percentage of removals from the Borough, excluding Institutions, was 55·5.

MEASLES.

Number of Deaths	...	...	...	..	0
Death Rate per 1,000 living	...	...	...	...	0
Death Rate in 1904 from Measles in 76 large towns in England and Wales	...	...	...	...	0·46

Number of Deaths from Measles in the Borough at different ages :—

Year	Under 1 year	1 to 5	5 to 15	15 and upwards
1896	10	29	...	...
1807 ... ..	...	1	...	...
1898	5	30	...	...
1899 ... ..	...	...	...	...
1900	3	9	1	...
1901	2	...	...	..
1902	1	4	...	...
1903 ... ..	...	3	...	...
1904 ... ..	...	...	...	...

Table shewing the number of Deaths and Death Rates from Measles in Stoke-upon-Trent from 1900—1904 :—

Year	1890	1891	1892	1893	1904	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
No. of Deaths ...	2	6	6	22	0	1	39	0	35	0	13	2	5	3	0
Death Rate ..	·09	·24	·24	·86	·00	·03	1·44	0	1·24	0	·47	·07	·16	0·9	0
Death Rate for 33 large towns ...	...	·52	·68	·44	·62	·53	·72	·55	·56	·46	·43	·43	...	...	..
Death Rate for 76 large towns ...	...	...	..	...	...	...	...	...	...	...	....	...	·50	·36	·46

Measles is not a disease which is notified in the Borough. Our chief sources of information are the School Attendance Officers and Teachers.

I have not advised that the disease should be made notifiable.

Leaflets giving hints on the treatment and precautions to be taken were freely distributed by the Attendance Officers and School Teachers.

Towards the end of the year the Borough was threatened with an epidemic of Measles. It was distinctly introduced from neighbouring districts, and was spread by contact at schools or gatherings of children. As most of those attacked at first were children of the better classes, the spread of the disease was easily watched. The disease ultimately attacked the children attending Garner Street Schools ; these Schools were closed on December 12th, and re-opened after the holidays on January 9th. The Christmas holidays occurring at this juncture seemed to put a stop to the further spread of the disease.

SCARLET FEVER.

Number of cases	...	...	...	...	228
Number of Deaths	...	...	...	...	9
Death Rate per 1,000 living	...	...	...	...	0·271
Case Mortality per 100 cases	...	...	...	...	3·9
Number of Cases Removed to the Isolation					
Hospital	...	...	...	...	113 = 49 per cent.

Four deaths occurred amongst the cases removed to the Isolation Hospital, while 5 occurred amongst those which remained at home.

Table shewing number of cases and deaths with Death Rate and Case Mortality per 100 cases of Scarlet Fever in the Borough :—

	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
No. of Cases	143	131	299	265	228	132	109	300	409	233	97	57	155	228
No. of Deaths	5	3	3	6	7	3	6	22	17	6	5	2	5	9
Death Rate...	·24	·11	·11	·23	·26	·14	·21	·77	·59	·20	·16	·063	·156	·271
Case Mortality per 100 cases	3·5	1·0	1·0	2·2	3·0	2·3	5·4	7·3	4·1	2·5	5·1	3·5	3·2	3·9
Death Rate for 33 large towns of England & Wales	·17	·29	·29	·20	·17	·22	·18	·14	·13	·13	·16	In 76 large towns ·19	In 76 large towns ·14	·13
No. of Cases removed to Isolation Hospital ...	13	12	83	83	51	17	16	60	117	152	64	44	97	113
Percentage removals ...	9·0	9·1	27·7	32	22·3	12·8	14·5	20	28·5	65·6	66	77	62	49

Few cases, except those requesting removal, were removed to the Isolation Hospital.

During the last quarter of the year the Hospital was full, and few cases were removed. The disease was fortunately very mild.

NUMBER OF CASES NOTIFIED IN 1904 :—

From the North Stafford Infirmary	...	...	7
„ Institution for the Blind and Deaf	...	...	4
„ Borough, including Institutions	...	...	217
<hr/>			
Total	...	...	228

Cases classified according to months in 1902—4 :—

	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
Number of Cases, 1902	7	9	8	6	6	7	1	3	3	0	5	2
„ „ 1903	4	8	9	3	10	13	5	8	11	19	36	29
„ „ 1904	30	10	20	14	3	4	8	8	14	44	41	32

More than half the cases—viz., 117—occurred in the last quarter of the year ; of these, 2 died, 1 was the case of a Nurse from the North Stafford Infirmary.

Of the 228 cases of Scarlet Fever, 11 occurred in Institutions ; 174 houses were infected in the Borough, with 43 secondary cases, *i.e.*, 20 per cent. of the cases.

Two cases were removed from the Institution for Blind and Deaf Children, and 7 from the North Stafford Infirmary to the Isolation Hospital.

WHOOPIING COUGH.

Number of Deaths 1

Death Rate 0·031

Death Rate in 76 large towns of

England and Wales... 0·42

Number of Deaths and Death Rate for years 1890-1904 :—

	Number of Deaths	Death Rate	Death Rate in the 33 large towns
1890	3	0·13	0·59
1891	23	0·99	0·64
1892	14	0·47	8·56
1893	6	0·23	0·23
1894	6	0·23	0·48
1895	8	0·30	0·36
1896	4	0·14	0·57
1897	3	0·10	0·41
1898	6	0·21	0·42
1899	6	0·28	0·38
1900	4	0·13	0·44
1901	9	0·29	0·36
1902	8	0·255	in 76 large towns 0·37
1903	15	0·467	0·32
1904	1	0·031	0·42

This Disease has been moderately prevalent during the year.

DIARRHŒA.

Number of Deaths	...	...	...	...	39
Death Rate per 1,000 of the population	...				1·186
Death Rate for the large towns of					
England and Wales	...	...	...	...	1·26

Table shewing the Number of Deaths from Diarrhœa with the Death Rates from 1890-1904 :—

Year	No. of Deaths	Death Rate	Death Rate for the 33 large towns	No of Deaths in Children under 1 year
1890	18	0·80	0·79	...
1891	12	0·49	0·65	...
1892	12	0·47	0·70	...
1893	25	0·98	1·22	...
1894	4	0·15	0·49	...
1895	27	0·02	1·18	...
1896	21	0·77	0·80	15
1897	41	1·48	1·24	34
1898	31	1·10	1·22	27
1899	54	1·89	2·21	27
1900	22	0·74	0·93	19
1901	32	1·04	1·22	31
1902	13	0·414	0·54	10
1903	13	0·405	0·70	11
1904	39	1·186	1·26	31

Most of the deaths from Diarrhœa occur in children under one year of age, and the measures to be employed in combating the disease are practically the same as those aimed at reducing infantile mortality.

ENTERIC FEYER.

Number of cases in the Borough in 1904	...	12
Number of Deaths	... ..	5
Death Rate per 1,000 of the Population	...	0·152

Years	...	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
No. of Cases	...	...	...	...	...	...	...	56	48	62	79	33	26	33	29	12
No. of Deaths	...	6	5	4	5	5	3	7	8	12	22	5	6	2	2	5
Death Rate	...	·27	·20	·15	·19	·19	·11	·26	·29	·42	·77	·16	·20	·063	·062	0·152
Case Mortality per 100	...	...	...	...	...	...	...	12	16	19	28	15	23	6	7	41
Death Rate of 33 large towns of England and Wales	...	·10	·10	·14	·24	·19	·19	·19	·18	·20	·22	·19	·16	for 76 large towus ·15	for 76 large towns ·11	·11

The number of cases notified during the year was very small, but nearly half proved fatal. Three cases occurred in one house.

Special pails were supplied to all infected houses, with disinfectants to receive the excreta. These pails were removed twice weekly, and the contents buried. In all cases careful examination was made of the premises, and disinfection carried out at the termination of each case.

Arrangements exist with the University of Birmingham, through the County Council, for Bacteriological diagnosis of Enteric Fever cases ; it was made use of in 1 case, with a negative result.

The only hospital accommodation for Typhoid Fever is at the North Stafford Infirmary and the Workhouse Hospital. We were able to remove 6 cases out of the total 12—1 to the Workhouse Hospital, and 5 to the North Stafford Infirmary.

The advisability of providing accommodation at the Bucknall Isolation Hospital is being considered by the Joint Board.

There is no ambulance available for the removal of Enteric Fever cases.

PHTHISIS AND OTHER FORMS OF TUBERCULOSIS.

Number of Deaths from Phthisis ...	...	29
Death Rate ...	...	·88
Number of Deaths from other forms of Tuberculosis ...	...	12
Death Rate (per 1000 living) from other forms of Tuberculosis...	...	·36

Table showing the Number of Deaths and Death Rates from Phthisis in the Borough in the years 1891-1904 :—

	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
No. of Deaths ...	26	38	30	29	46	35	28	26	27	31	31	31	25	29
Death Rate ...	1·03	1·50	1·18	1·11	1·79	1·29	1·01	0·92	0·94	1·05	1·01	·98	·77	·88
Death Rate from Phthisis in England and Wales ...	1·59	1·46	1·46	1·38	1·39	1·30	1·34	1·31	1·33	1·33	1·29	1·23	...	...

OTHER FORMS OF TUBERCULOSIS.

In 1904 there were 12 deaths due to forms of Tuberculosis other than Phthisis ; in 1903 there were 16 ; in 1902 there were 16 ; in 1901 there were 10 ; in 1900, 15 ; in 1899, 17 ; in 1898, 24 ; in 1897, 13 ; in 1896, 16.

Through the arrangements made by the County Council with the University of Birmingham, medical men in the Borough

have facilities for bacteriological diagnosis in doubtful cases ; they have been taken advantage of on 4 occasions, with 1 positive and 3 negative results.

I regret to have to report that no steps have yet been taken to further combat Tuberculous diseases. I brought the matter to the attention of the Health Committee in 1901, and I can only again urge that something should be done without delay.

Disinfection is occasionally done on request.

In one district in the kingdom, compulsory notification is now in force, and in many places voluntary notification is employed.

The County Council are considering a scheme for the erection of a Sanatorium in the Country.

DISEASES OF THE RESPIRATORY ORGANS.

				Number of Deaths
Bronchitis	...	...	...	51
Pneumonia	...	...	...	26
Pleurisy	...	...	...	2
Other Diseases	...	...	...	1
Total				80
Death Rate per 1,000 living				2·37

Nearly one-fourth of the above total occurred in the month of December. Influenza was prevalent at that time.

Number of Deaths, with Death Rate from Bronchitis, Pneumonia, and Pleurisy, in the Borough in the years 1901-1904.

Year	...	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
No. of Deaths	...	88	74	72	77	90	78	77	76	88	96	104	95	71	80
Death Rate	...	3·24	2·93	2·84	2·96	3·48	2·89	2·79	2·69	3·08	3·25	3·39	3·02	2·21	2·37

The rate for the year is a little higher than that for 1902, which was the lowest recorded.

The average Death Rate in England and Wales for 1889-1897 from diseases of the Respiratory Organs was 3·5 ; in 1898 the rate was 2·9 ; in 1899, 3·177 ; in 1900, 3·39.

LEAD POISONING.

Deaths in the Borough from Lead Poisoning in the years 1896-1904 :—

1897	...	...	...	2
1898	...	...	...	1
1899	...	..	...	2
1900	...	...	...	0
1901	...	...	..	0
1902	...	...	...	0
1903	...	...	...	0
1904	...	...	...	0

The total number of cases of Lead Poisoning in the China and Earthenware Trades reported to the Chief Inspector of Factories and Workshops for the years 1899, 1900, 1901, 1902, and 1903 were as follows :—

		Males		Females		Total
1899	...	128	...	121	...	249
1900	...	95	...	104	...	200
1901	...	57	...	49	...	106
1902	...	40	...	47	...	87
1903	...	43	...	54	...	97

The proportion of cases of Lead Poisoning to Persons employed in Lead Processes in China and Earthenware Factories was in 1899, 3·9 per cent. ; in 1900, 3·1 per cent. ; in 1901, 1·7 per cent. ; in 1902, 1·4 per cent. ; in 1903, 1·5 per cent.

ALCOHOLISM.

During the past year 11 deaths were registered as caused by Alcoholism ; in 1903, there were 10 ; in 1902, there were 9 ;

in 1901, there were 4 ; and in 1900, there were 5 ; and giving rates per 1,000 of the population as follows :—

1900	...	...	...	0·17
1901	...	...	...	0·13
1902	...	...	...	0·28
1903	...	...	...	0·31
1904	...	...	...	0·33

For England and Wales at the rate per 1,000 in 1900 was 0·11 ; in 1901, it was ·09 ; and in 1902, it was ·08.

VACCINATIONS.

	Births Registered	Successfully Vaccinated	Insusceptible	Had Small-pox	Died	Postponed	Removals Certified	Removals Unvaccinated	Unvaccinated	Conscientious Objections	Number of Vaccinations to 100 Births
1896	730	554	2	0	94	17	4	27	33	0	76
1897	733	587	2	0	101	15	3	51	14	0	80
1898	830	550	1	0	100	19	4	58	97	1	66
1899	832	585	6	0	124	37	18	42	15	5	70
1900	923	633	0	0	137	64	11	49	22	7	68
1901	935	672	0	0	134	49	7	32	36	5	71
1902	1043	747	0	0	132	60	8	54	42	0	71
1903	1036	776	1	0	119	38	15	69	14	4	74
Half year ending June 1904	583	402	1	0	68	41	8	23	39	1	...

SMALL-POX.

One case of Small-Pox was notified in the Borough in the month of August. The Patient, an Adult Female, had been in contact with cases in a neighbouring district. She was removed to the Small-Pox Hospital, and disinfection and vaccination of contacts resorted. No further cases occurred.

SMALL-POX HOSPITAL ACCOMMODATION.

The Joint Small-Pox Hospital Board are erecting a permanent Hospital on the site at Bagnall.

Death Rates, &c., in Stoke-upon-Trent and certain other Towns in 1903.

TOWN	Population at middle of 1904	Birth Rate per 1000	Death Rate per 1000	Zymotic Death Rate	Phthisis Death Rate	Respiratory Death Rate	Death Rate from other forms of Tuberculosis	Infant Deaths per 1,000 Births
WEST BROMWICH	67,186	33.5	15.9	1.9	...	...	...	149
CREWE	46,065	30.9	14.5	1.6	0.6	2.9	0.9	160
ASHTON-UNDER-LYME	44,541	27.0	17.2	1.8	.09	3.4	.0089	172
STALYBRIDGE	28,415	23.7	18.6	3.9	1.1	3.4	...	210
LONGTON	35,293	38.7	21.5	3.0	1.5	5.9	0.8	194.1
DERBY	120,449	27.25	15.15	1.5	1.03	2.3	0.6	143
ECCLES	36,400	27.7	14.8	1.7	1.07	2.3	0.45	144
WIGAN	64,249	34.59	21.49	3.14	1.08	4.74	0.40	188
BILSTON	24,250	37.07	18.9	3.09	0.7	4.1	0.28	220
WOLVERHAMPTON	98,268	29.8	14.6	2.71	0.90	2.45	0.55	152
TUNSTALL	26,420	34.9	21.7	2.9	0.9	4.2	0.3	245
ASTON MANOR	80,363	29.1	15.8	2.9	1.2	...	...	187
PUDSEY	14,940	20.9	14.3	1.7	0.51	2.6	0.6	156
LANCASTER	43,570	24.48	13.01	0.96	1.05	2.22	0.82	153
HANLEY	63,889	33.8	21.2	4.1	1.01	3.7	0.9	206
STAFFORD	22,572	28.75	16.96	1.47	1.18	2.7	..	155
ENGLAND AND WALES ... ..	...	27.9	16.2	1.94	...	...	...	146
RURAL ENGLAND AND WALES ... ..	...	26.8	15.3	1.28	...	...	...	125
76 GREAT TOWNS ... ..	...	29.2	17.2	2.49	...	...	...	160
142 Smaller Towns ... ..	...	27.5	15.6	2.02	...	...	...	154
STOKE-UPON-TRENT	32,898	32.8	15.9	2.401	0.88	2.37	0.36	148

RAINFALL AT HARTSHILL IN 1904.

Rain Gauge	Diameter of Funnel 5 inches		
	Height of Top	Above Ground ... 1 foot	
		Above Sea Level ... 485 feet	

(By JOSEPH KNIGHT, ESQ.)

Month	Total Depth		Greatest fall in 24 Hours		Number of Days on which .01 or more fell
	Inches	Depth	Date		
January	2.79	.44	7th		24
February	3.01	.35	3rd		22
March	1.80	.45	30th		14
April	1.74	.27	13th		18
May	2.57	.45	27th		22
June	1.10	.50	24th		10
July	2.04	.94	25th		14
August	4.77	2.12	17th		20
September ...	1.95	.56	30th		11
October	1.43	.64	26th		12
November	1.84	.41	8th		12
December	2.00	.30	17th		20
TOTAL	27.04	7.43			199

In 1903 the rainfall was 39.32 inches, with 206 rainy days

„ 1902	„	„	28.92	„	„	213	„	„
„ 1901	„	„	29.75	„	„	180	„	„
„ 1900	„	„	34.22	„	„	205	„	„
„ 1899	„	„	29.44	„	„	167	„	„
„ 1898	„	„	31.58	„	„	178	„	„
„ 1897	„	„	32.48	„	„	195	„	„

Average rainfall for 7 years—1897-1903—was 32.24,

ISOLATION HOSPITAL.

The Contagious Diseases Hospital at Bucknall, in the Rural District of Stoke-upon-Trent, serves the Urban Districts of Hanley, Fenton, and Stoke-upon-Trent, and the Rural District of Stoke-upon-Trent, and recently the Urban District of Longton has become one of the Joint Districts ; it is under the management of a Joint Hospital Board. There are in the Hospital 72 beds and cots for Scarlet Fever, and 36 for Diphtheria, besides 23 beds and cots for private patients and observation purposes. In all about 125 beds and cots. There is no provision for Typhoid Fever, but the question of making provision has been discussed. The buildings are permanent ones, pavilions connected by covered ways.

The Staff of the Hospital consists of—

A Visiting Medical Officer

A Female Resident Medical Officer

A Master and Matron

Nurses and Probationers to the required number.

The population of the Joint District now exceeds 160,000.

SCALE OF CHARGES

Adopted by the Board on the 10th day of June, 1892, and the 3rd day of June, 1898, for maintenance and care, &c., of patients admitted by order of a Medical Officer of Health within the District of the Board :—

Patient under 14 years of age	...	...	1/4 per day
Patient 14 years of age and upwards	...	...	1/9 per day
Medical Attendance, in each case attended			
by the Board's Medical Officer	...	...	£1 1s.
Contribution to Common Fund, per patient			£3 10s.

PRIVATE PATIENTS.

Patients treated in Private Wards...	...	5/- per day
Medical Attendance, in each case attended		
by the Board's Medical Officer...	...	£2 2s.
Contribution to Common Fund, per patient		£2 10s.

The cubic space allowed per patient at the Hospital is about 1,150 feet. Amongst other disadvantages of this small allowance is the impossibility of providing any extra beds in times of epidemic. I have in previous reports pointed out that the space allowed is less than is usually considered necessary.

The rule of the Board that the Ambulance is not to be asked for after 2 o'clock for removal of cases on the same day except in cases of urgency has not aided in the prompt removal of cases. If the Ambulance is disengaged, it ought to be possible to have any case removed after 2 o'clock.

During the year 206 cases were removed to the Isolation Hospital from the Borough ; 113 were cases of Scarlet Fever, and 93 were cases of Diptheria.

Number of Patients remaining in the Hospital at the end of 1903	...	...	...	...	32
Number of Patients removed to the Hospital in 1904	...	...	...	...	206
					<hr/>
Total	...	...	...	...	238
Number of Patients remaining in the Hospital at the end of 1904	...	...	...	...	28
					<hr/>
Number of Patients Discharged or Died	...	...	...	...	210
Number of Patients Chargeable to other Authorities	...	...	...	...	16
					<hr/>
Number of Patients Chargeable to the Borough	...	...	...	...	194

The isolation of 194 Patients at the Hospital entailed an expenditure of £1,508 0s. 11d. No special precepts were levied. £400 was placed to 1904 from the special precept of the previous year, so that the total sum, £1,908 0s. 11d., was spent in the isolation of 194 Patients, or about £9 16s. per Patient. In the year 1903 the expenditure was £1,246 12s. for

90 Patients, *i.e.*, about £13 17s. per Patient. In 1902 the expenditure was £1,033 7s. 10d. for 83 Patients, *i.e.*, about £12 15s. per Patient ; and in 1901 the expenditure was £1,413 3s. 2d for 186 cases, *i.e.*, about £7 12s. per Patient.

OFFENSIVE TRADES.

There are in the district 1 Fellmonger's establishment, 1 Tripe Boiling business, and a Rag and Bone Store. There are no Bye-laws with respect to Offensive Trades.

Regular inspections have been carried out, and no serious complaints have been received.

Calcining of Bones is carried on on two of the Factories in the Borough. There has been no serious nuisance from this source during the year.

The Fish-frying Shops in the Borough steadily increase in number ; they give rise to distinct nuisances from the smell.

SLAUGHTER-HOUSES.

There are in the Borough 4 licensed Slaughter-houses, and 6 registered ones. There are Bye-laws for their regulation, they are not, however, up-to-date.

Ninety-seven inspections of these premises have been made during the year.

Some of the Slaughter-houses are used as Stables, horses being kept in the lairs.

The removal of Offal and Manure is not satisfactorily done. Obliterated Notices are allowed to remain.

Under present conditions it is impossible to efficiently inspect meat sold in the Borough.

The Bye-laws should be brought up-to-date, and properly enforced.

DAIRIES, COW-SHEDS, AND MILK-SHOPS.

There are in the Borough 12 Dairies and Cow-sheds, and 44 Milk-shops. During the year 126 inspections were made.

The Regulations of the Local Government Board came into force in the Borough in November, 1901.

The Cow-sheds are, on inspection, usually found in a dirty condition, and badly ventilated. The Regulations are not properly enforced.

WATER SUPPLY.

The Staffordshire Potteries Water Works Company supplies the Borough with water. The quality is good and the supply constant and adequate. The water supplied to Stoke-upon-Trent is derived from the deep wells in the Bunter Sandstone at Hatton. From these wells the water is pumped to a reservoir 775 feet above the sea level, and from thence the mains run through Trentham, Hanford, and Trent Vale to Penkhull, the highest point in the Borough (550 feet above the sea level), and from these it is distributed throughout the town. The pressure in the mains is very considerable.

The following is the analysis of a sample of water from a tap direct from the main :—

The analysis was made by me, February 16th, 1903. It shows that the water supplied to the Borough is very good.

	Parts per 100,000
Total Solid Matter dried at 212°F. ...	20·9
Free and Saline Ammonia ...	0·0016
Organic Ammonia ...	0·003
Nitric Nitrogen... ...	0·38
Combined Chlorine ...	1·1
Oxygen absorbed in 4 hours at 80°F. ...	0·000
Colour ...	Pale bluish
Hardness before Boiling ...	7·63
Hardness after Boiling ...	5·4
Nitrites ...	Absent

There are still some instances in the Borough of very insufficient water supply.

A large number of Water Closets in the Borough are without Flushing Cisterns. In several instances the water supply to the houses is deficient, and this deficiency is much increased in instances where there are Water Closets without Flushing Cisterns.

Where Cisterns exist, but the supply pipes have been cut or beaten up, immediate steps should be taken to insist on the defect being remedied.

There are now only about half-a-dozen houses supplied by private wells.

SMOKE NUISANCE.

A limited number of observations made during the year by the Inspector show that nuisances exist from excessive emission of smoke.

Notices to abate the nuisance have been served in some instances, but the Inspector has not been able to continue his observations through lack of time.

FOOD AND DRUGS ACTS.

BOROUGH OF STOKE-UPON-TRENT.

For the information of the Medical Officer of Health for the Borough of Stoke-upon-Trent. Particulars of samples purchased in Stoke-upon-Trent, for analysis by the County of

Stafford Inspector under the Food and Drugs Act, for the year ending December 31st, 1904.

Description	No. of Samples	Adulteration	Genuine	Proceedings taken	Convictions
Flour	5	...	all	...	...
Bread	6	..	„	...	...
Tea	2	...	„	...	..
Cheese	4	...	„	...	...
Pearl Barley ...	3	...	„	..	...
Arrowroot... ..	3	...	„	...	...
Cream of Tartar ...	3	...	„	..	...
Tartaric Acid ...	2	...	„	...	...
Oatmeal	8	...	„	...	...
Camphorated Oil	6	...	„	...	...
Sweet Nitre	6	...	„	..	...
Milk	81	2	79	2	Fined £5 in each case
Butter	30	...	all	..	
Whiskey	3	..	„	...	...
Ale	10	...	„	...	...
Rum	4	...	„	...	...
Gin	5	...	„	...	...
Coffee	10	...	„	...	..
Cod Liver Oil ...	5	...	„	...	...
Lard	10	...	„	...	...
Brandy	2	...	„	...	...
Ginger	10	...	„	...	...
Pepper	8	...	„	...	...
Glycerine	3	...	„	...	...
Confectionery ...	6	...	„	...	...

E. W. T. JONES, Analyst.
E. W. H. KNIGHT, Chief Inspector

CANAL BOATS.

Stoke-upon-Trent is the Registration Authority for the whole of the surrounding district. There are 513 boats on the register ; 10 new boats were registered during the year.

In 1889 305 inspections were made, and 64 infringements detected

„ 1900 150	„	„	34	„	„
„ 1901 187	„	„	49	„	„
„ 1902 205	„	„	59	„	„
„ 1903 158	„	„	31	„	„
„ 1904 317	„	„	66	„	„

No legal proceedings were taken during the year. The custom is to serve a notice when infringements are detected.

COMMON LODGING HOUSES.

There are 2 Common Lodging Houses in the Borough, and there are Bye-laws in force for their regulation. In 1 there are 25 beds in the house available for single lodgers, and 3 for married couples. The House is an old one ; it is as well kept as it can be. It would be a distinct advance to have it replaced by a Municipal Model Lodging House.

The second one is also an old house, improved and re-arranged. It has been well kept.

Both the Houses have been regularly inspected.

MORTUARY.

The Borough Surveyor is now engaged on the Plans of a Mortuary, and I hope to be able to report, in another year, that the Borough is provided with this sanitary necessity.

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES
 AND HOMEWORK.

1.—INSPECTION.
 INCLUDING INSPECTIONS MADE BY SANITARY INSPECTOR.

Premises	—Number of—		
	Inspections	Written Notices	Prosecutions
Factories (including Factory Laundries)	50	7	0
Workshops (including Workshop Laundries)	12	1	0
Workplaces	0	0	0
Bakehouses	76	1	0
Homeworkers' Premises... ..	0	0	0
Total... ..	138	9	0

2.—DEFECTS FOUND.

Particulars	—Number of Defects—			Number of Prose- cutions
	Found	Remedied	Referred to H.M. Inspector	
Nuisances under the Public Health Acts :				
Want of Cleanliness	2	2	...	0
Want of Ventilation ... ..	...	...	...	...
Overcrowding ... ..	...	...	...	...
Want of Drainage of Floors ... ..	...	..	..	...
Other Nuisances ... ..	...	...	...	...
Sanitary Accommodation—				
Insufficient	2	2	...	...
Unsuitable	8	7	...	...
Not Separate for Sexes	0	0	...	...
Offences under the Factory and Workshop Act :				
Illegal Occupation of Underground Bakehouses	0	0	...	..
Breach of Special Sanitary Re- quirements for Bakehouses	2	2	..	...
Failure as Regard Lists of Out- workers	0	0	...	...
Giving out work to be done in premises which are—				
Unwholesome	0	0	...	...
Infected	0	0	...	...
Allowing Wearing Apparel to be made in premises infected by Scarlet Fever or Small-Pox	0	0	..	..
Other Offences	0	0	...	...
Total				
	14	20	...	0

3.—OTHER MATTERS.

	Number
Matters notified to H.M. Inspector of Factories :	
Failure to affix Abstract of the Factory and Workshop Act ... ..	...
Notified by H.M. Inspector	4
Reports sent to H.M. Inspector	0
Occupation of Workshops notified by H.M. Inspector	14
Underground Bakehouses :	
In use during 1904	0
Certificates Granted—	
In 1903	0
In 1904	0
In use at the end of 1904	0
	(Number of)
Homework :—	Lists Out-workers
Lists received	0 0
Addresses of Outworkers—	
Forwarded to other Authorities	0 ...
Received from other Authorities	0 ...
	Wearing Apparel Other
Notices prohibiting homework in unwholesome premises	0 ...
Cases of Infectious Disease notified in homeworkers' premises	0 ...
Orders prohibiting homework to infected premises ..	0 ...

WORKSHOPS ON THE REGISTER AT THE END OF 1904 :

	Number
Bakehouses	15
Dressmakers	33
Tailors	14
Boot-making and Repairing	16
Building, Joinering, &c.	14
Others	54
Total number of Workshops on Register	146

No Workshops, except newly-occupied ones, have been inspected by the Inspector of Nuisances during the past year.

All factories were inspected on instruction of the Committee, and the sanitary accommodation brought up to a fixed standard.

HOUSING OF THE WORKING CLASSES.

Alterations to 13 Houses in Poulson Square and Thomas Street have been completed. They have been converted into 10 Houses, and much improved.

Two Houses, Nos. 2 and 4 Hulme Street, have been reported as being unfit for habitation, and the Council has given instructions to take the necessary proceedings for their closure.

REMOVAL OF NIGHTSOIL AND ASHPIT REFUSE.

This work is done directly by the Council throughout the whole district. It has been regularly and as well done as it is possible with the present staff.

Nightsoil is removed only between the hours of 10 p.m. and 5-30 a.m. A small quantity is disposed of directly to farmers in the district, but most of it is taken to the Sewage Farm, and there mixed with ashes, and sent away as manure by canal boat.

The Ashpit Refuse has been, for the most part, tipped at Scotchman's Hole, whither it has been conveyed by boat on the canal from the wharf at Field Place.

The Ashpits ought to be emptied at night only, and the practice of emptying the contents first into the streets before filling the carts discontinued.

The Borough now possesses a Destructor ; it was completed during the year, and the Refuse is now being burnt there. It is built in conjunction with the Electric Lighting Works.

The Cesspools and Ashpits are emptied on an average seven times a year. This is not sufficiently frequent.

It is satisfactory to note that all new houses are now supplied with Ashbins ; there are over 3,000 in the Borough, and these are emptied once weekly, and in some cases more frequently. There are also 300 shops in the main streets where there is a daily collection of Refuse.

There are in the district 1,989 Cesspit Closets.

In 1897 40 Cesspit Closets were converted into Water Closets

„ 1898 161	„	„	„	„	„
„ 1899 172	„	„	„	„	„
„ 1900 300	„	„	„	„	„
„ 1901 174	„	„	„	„	„
„ 1902 128	„	„	„	„	„
„ 1903 127	„	„	„	„	„
„ 1904 104	„	„	„	„	„

The conversion of Cesspit Closets into Water Closets should be carried on more speedily than is being done at present : the number converted each year is, unfortunately, decreasing.

BYE-LAWS.

As pointed out in previous Reports, Bye-laws are needed for the following purposes :—

(1) Prevention of Nuisances.

The aim should be to prevent Nuisances, not to remedy them on their occurrence ; with a deficient Staff, and no Bye-laws for prevention, Nuisances must abound.

(2) For the Regulation of Houses let in Lodgings.

(3) New ones with respect to Slaughter-houses.

I have drawn attention to these deficiencies in Five Annual Reports.

DRAINAGE AND DISPOSAL OF SEWAGE.

As a rule, in the larger houses, and where Water Closets are situated in the houses, the Drains are ventilated by a pipe continued upwards from the soil pipe, but only in houses specially re-drained within the last few years are the Drains disconnected by a trap and inspecting chamber from the Sewer. In smaller houses, with the Water Closets outside, there is no disconnection of Drains from Sewers, and in those that have the Drains ventilated, it is done by means of the rain-water fall pipes.

All houses, under the New Bye-laws, have the Drains disconnected and ventilated. The Sanitary Clauses of the New Bye-laws are being efficiently enforced.

A systematic effort should be made to disconnect the rain-water fall pipes from the Drains and Sewers, and provide proper ventilation.

All Sewage of the Borough, except in the case of a few isolated houses, is dealt with at the Sewage Farm at Boothten. It is all pumped both day and night. The average amount of Sewage in 24 hours is over 1,000,000 gals.

The Farm is 45 acres in area. The Sewage is treated by subsidence, and by land filtration and irrigation. The Effluents pass into the River Trent. The Sludge is dried by exposure in the open air, and spread on the land. Sewage from one of the mains can be used to irrigate the Boothten Farm, adjoining the Sewage Farm.

STAFF.

Besides myself as Medical Officer of Health, devoting a portion of my time to the work of the Health Department, at a salary of £105 per annum, which includes my remuneration for Analysis of Sewage Effluents, there is 1 Inspector of Nuisances, and a Lad in the Office. I would again urge the appointment of a second Inspector.

The Borough now has a population of 33,000, and is 1,882 acres in area, with 7,000 houses.

The duties of the Inspector of Nuisances include the superintending, with the aid of a Foreman, the Removal of Nightsoil and Ashes, and the Inspection of Workshops; he has, too, duties under the Contagious Diseases (Animals) Act. He is an Inspector under the Canal Boats Act. He has to make all enquiries in cases of Infectious Diseases, &c.

Two years ago, the Health Committee advised the appointment of an Assistant Inspector, but this was not sanctioned by the Council.

The plea of "No time" I have heard accepted as a valid excuse for the non-performance of instructions.

There is no proper systematic Inspection of the Borough—Workshops have not been inspected ; few Smoke observations have been made, &c.

I should like also to draw attention to the accommodation at the Health Offices. It is insufficient, and highly insanitary.

The Office measures $7\frac{3}{4}$ -ft. by $15\frac{3}{4}$ -ft. There is no fire place ; it is heated by a gas stove. Disinfectants are stored in it. The ventilation is defective. I have, frequently, on going into the Office, found three persons in it, and have had to retire as quickly as possible on account of the foul atmosphere. It is most unhealthy for the Staff.

HEALTH OFFICE,

STOKE-UPON-TRENT,

JANUARY 11TH, 1905.

SANITARY INSPECTOR'S ANNUAL REPORT

TO THE

MEDICAL OFFICER OF HEALTH.

DEAR SIR,

I have pleasure in presenting to you the Annual Report of work done in my Department during the past year.

SCAVENGING.

During the past year, I received complaints as follows :—

Ashpits, 71 ; Cesspools, 350 ; Total, 421.

as compared with

Ashpits, 56 ; Cesspools, 295 ; Total, 351.

for the year 1903.

The following is a Summary of work done for the Fifty-two weeks ending December, 1904 :—

Ashpits cleared	...	...	...	20,063
Dustbins cleared (weekly)	...	...	...	142,952
Loads removed	...	...	...	10,989
Cesspools cleared	...	..	...	13,821
Tubs removed (nightsoil)	...	...	...	4,180
Horses employed	...	...	..	10
* Wages paid	...	...	£1,554	13s. 5d.

* This amount includes what is paid for labour in disinfecting. Since the middle of October, no wages have been paid for boating.

The following are the figures for the year previous :—

Ashpits cleared	...	...	...	...	24,368
Dustbins cleared (weekly)	...	...	...	...	112,627
Loads removed	..	...	...	...	11,117
Cesspools cleared	...	...	...	...	15,022
Tubs removed	...	...	...	...	4,652
Horses employed	...	...	...	...	10
Wages paid	...	...	...	£1,653	1s. 5d.

ASHPITS AND WEEKLY DUSTBINS.

The number of Open Ashpits are steadily decreasing ; and the number of Dustbins collected weekly are now over 3,000, so that about half the houses in the Borough have now a weekly collection of refuse. The Ashpits are being emptied with more frequency, the whole district being covered in about seven weeks.

CESSPOOL CLOSETS.

At the end of 1903, there were 2,093 Cesspool Closets in the Borough, 104 of these have been removed during the year, making the number, at the end of 1904, to be 1989.

These have been emptied about 7 times during the year. For want of tips, this work gets more difficult and costly, owing to the increased distance the refuse has to be carried.

I append Copy of Table showing Summary of Work done as required by the County Council. Besides the Work shown in this Table, over 100 Drains and Closets have been unstopped, by personal arrangements with the owners and occupiers. In this respect, Slop Closets give by far the greatest amount of trouble.

I am,

Your obedient servant,

T. STAKE, ASSO. ROYAL SAN. INST.

SUMMARY OF SANITARY WORK.

			Inspections and Observations made		Formal Notices by Authority		Nuisances Abated after Notice		
Dwelling- houses and Schools	{	Foul Conditions ...	...	25	...	25	...	27
		Structural Defects ...	...	24	...	24	...	28
		Overcrowding ...	...	2	...	2	...	3
		Unfit for Habitation	...	2	...	2	...	—	
		Lodging-houses ...	...	146	...	2	...	2
		Dairies and Milkshops	{	...	126	...	—	...	—
		Cowsheds ...							
		Bakehouses ...	...	76	...	1	...	1
		Slaughter-houses ...	...	97	..	—	...	—
		Canal Boats ...	...	317	...	41	...	39
		Ashpits and Privies ...	...	88	...	80	...	87
		Deposits of Refuse and Manure		2	...	2	...	2	
		Water Closets ...	...	18	...	18	...	19
House Drainage	{	Defective Traps ...	...	11	...	10	...	16
		No Disconnection ...	...	2	...	2	...	7
		Other Faults...	...	51	...	53	...	67	
		Water Supply ...	...	—	...	—	...	10
		Pigsties ...	...	2	...	2	...	2
		Animals improperly kept	...	4	...	4	...	4	
		Offensive Trades ...	...	1	...	1	...	1
		Smoke Nuisances ...	...	14	...	2	...	—
		Other Nuisances ...	...	2	...	2	...	2

TOTALS ... 1010 ... 273 ... 317*

* These include notices in abeyance from last.

Seizures of unwholesome Food	...	...	1
Samples of Food taken for Analysis...	...	—	
„ „ found Adulterated	...	—	

PRECAUTIONS AGAINST INFECTIOUS DISEASE.

Lots of Infected Bedding Disinfected or Destroyed	...	284
Houses Disinfected after Infectious Disease	...	320
Schools „ „ „ „	...	3
Prosecutions for not Notifying Existence of Infectious Disease	...	—
Conviction for not Notifying Existence of Infectious Disease	...	—
Prosecutions for Exposure of Infected Persons or Things	—	
Convictions „ „ „ „	...	—

